

PATENT CLAIMS

1. An antenna device for use with a radio transmitter (122) mounted in an electrical installation cabinet (100) such as a fuse box, where at least one electrical supply line (130) is passed through an opening (140) in the installation cabinet (100), comprising a signal connection of the radio transmitter's antenna output (150) to a section of the supply line inside the installation cabinet (100), said radio transmitter's antenna output (150) comprising a first (152) and a second (154) conductor, the device further comprises connector devices for connecting the first conductor (152) to a first point (136; 137) on the supply line, characterised in that the device further comprises connector devices for connecting the second conductor (154) to a second point (138) on the supply line, whereby the supply line (130) is employed as a travelling wave antenna for the radio transmitter (122).
2. A device according to claim 1, where the signal connection is a galvanic connection, the device comprising contact devices for connecting the first conductor (152) to a first point (136) on the supply line and the second conductor (154) to a second point (138) on the supply line.
3. A device according to claim 2, designed as a cable terminal, arranged to enclose the supply line (130), where the contact devices comprise metallic contacts designed to be pressed through an insulation sheath (134) in order thereby to come into contact with the electrical conductor (132) in the supply line (130).
4. A device according to one of the claims 1-3, where the radio transmitter (122) is a combined radio transmitter and receiver operating on a frequency greater than or equal to 60 MHz.
5. A remote reading device (120) for remote reading of an energy consumption meter (110), to be mounted in an electrical installation cabinet (100) such as a fuse box, where at least one electrical supply line (130) is passed through an opening in the installation cabinet (100), comprising
- a reading unit (124) for reading the supply meter (110),
 - a control unit (126), and
 - a radio transmitter (122),
- characterised in that it further comprises an antenna device for use with the radio transmitter, as indicated in claim 1, whereby the supply line (130) is employed as a travelling wave antenna for the radio transmitter (122).

6. A method for providing an antenna for a radio transmitter (122) with an antenna output (150) comprising a first (152) and a second (154) conductor, said transmitter (122) being mounted in an electrical installation cabinet (100) such as a fuse box, where at least one electrical supply line (130) is passed through an opening in the installation cabinet, said method comprising the step of
- signal connection of the radio transmitter's antenna output (150) to a section of the supply line (130) inside the installation cabinet,
the method comprising a signal connection of the first conductor (152) to a first point (136; 137) on the supply line,
characterised in that the method further comprises
a signal connection of the second conductor (154)
to a second point (138) on the supply line,
whereby the supply line (130) is employed as a travelling wave antenna for the radio transmitter (122).
7. A method as indicated in claim 6,
where the radio transmitter is a combined radio transmitter and receiver operating on a frequency greater than or equal to 60 MHz.
8. Use of a single electrical supply line, which is passed into or out of an electrical installation cabinet such as a fuse box, as a travelling wave antenna for a radio transmitter mounted inside the installation cabinet.